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Michael J. Tynen

A Checklist and Bibliography of the North American Enchytraeidae (Annelida: Oligochaeta)

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A Checklist and Bibliography of the North American Enchytraeidae (Annelida: Oligochaeta)

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Note de l'éditeur*

La liste de contrôle compte 143 espèces nord-américaines. Parmi celles-ci, 74 se rencontrent à l'est des Rocheuses, en deçà et au delà du cercle arctique. De ces 74 espèces, 36 sont également connues en Europe, en Islande et au Groenland, et la quasi totalité de ces 36 formes nous sont révélées par des études récentes (Dash 1970, Lasserre 1971, Nurminen 1973a,b). Cependant, les mêmes documents ne mentionnent aucune des autres espèces décrites dans les ouvrages nord-américains antérieurs. Selon Nurminen (1973c,d), cela porte à croire que plusieurs des formes nord-américaines précédemment décrites ne sont, en fait, que des espèces européennes connues sous des noms différents.

Les enchytréidés distribués à l'ouest des Rocheuses différeraient nettement des autres et, au moins les formes côtières, auraient des affinités avec celles de Sibérie (Tynen 1969).

* The note is a translation of the Discussion section appearing on page 9, reproduced here for the benefit of French readers.

Introduction

The Enchytraeidae in North America have been better served by early authors than in Europe, there being few cases of totally inadequate descriptions. Moreover, since the literature has been fairly sparse, fairly recent, and nearly all in English, authors have been easily able to scan previous descriptions before publishing new ones. Because of these factors, synonomies are infrequent. However, as a result of certain generic revisions and invalidations (Cernosvitov 1934, 1937; Nielsen and Christensen 1959), many species have been transferred to different genera from those in which their author placed them.

A revision of the family would obviously be desirable, especially in extending and verifying those descriptions based on limited material (sometimes only one specimen of doubtful maturity). However, this would be a major undertaking, since, in many cases, type specimens are lost; type collections and collecting stations are widely scattered over (and even outside) the continent, often in inaccessible locations (e.g., outer Alaskan Islands). Also, vast areas of North America have never been examined for enchytraeids; doubtless, many new species are yet to be described. It is hoped that the present paper will form a useful basis and beginning for a revision.

Checklist

Each citation is accompanied by a letter indicating the region in which the species has been collected: (C) known from cultures; (M) Mexico; (A) north of the Arctic Circle; the rest of North America is divided into (E) east of continental divide and (W) west of divide. Species dubiae are prefixed with a question mark. Synonyms are inset in parentheses.

SPECIES * (species first discovered outside North America)	N. Am. records of species first discovered outside N. Am.	Additional N. Am. records of species first discovered in N. America	Area of N. Am. records
Achaeta Vedjovsky, 1877			
* *camerani* (Cogn., 1899)	Nurminen 1973a		E
* *eiseni* (Vedj., 1877)	Nurminen 1973a		E
silvatica Nurm., 1973a			E
Bryodrilus Ude, 1892			
arctica (Bell, 1962)			W
* *ehlersi* Ude, 1892	Nurminen 1973a,b		A
novaescotiae (Bell, 1962)			E
* *parvus* Nurm., 1970	Nurminen 1973b		A
p. kananaskis Dash, 1970			E
Bucholzia Michaelsen, 1887			
* *appendiculata* (Buch., 1862)	Nurminen 1973a		E
Cernosvitoviella Nielsen & Christensen, 1959			
* *atrata* (Bretsch., 1903)	Nurminen 1973a		E
celere Nurm., 1973a			E
christenseni Dash, 1970			E
* *immota* (Knolln., 1935)	Lasserre 1971		E
pusilla Nurm., 1973b			A
Chirodrilus Smith & Verrill, 1871			
A dubious genus, not very clearly defined. Known from only one set of specimens.			
abyssorum Smith & Verrill, 1871			E
larviformis Smith & Verrill, 1871			E

SPECIES * (species first discovered outside North America)	N. Am. records of species first discovered outside N. Am.	Additional N. Am records of species first discovered in N. America	Area of N. Am. records
Cognettia Nielsen & Christensen, 1959			
* *glandulosa* (Mich., 1868)	Nurminen 1973a		E
Enchytraeus Henle, 1837			
alaskae Eisen, 1904			W
* *albidus* Henle, 1837	Altman 1936, Lasserre 1971, Moore 1905, Smith 1895, Welch 1917a		E,C
* *bucholzi* Vedj., 1879	Dash 1970, Nurminen 1973a		E
* *capitatus* Bulow, 1957	Lasserre 1971		E
cryptosetosus Tynen, 1969			W
fragmentosus Bell, 1959			C
gillettensis Welch, 1914a			E
kincaidi Eisen, 1904			W
* *minutus* N. & C., 1961	Nurminen 1973a, 1973b		A
Fridericia Michaelsen, 1889			
agilis Smith, 1895			E
agricola Moore, 1895b		Bell 1942	E
alba Moore, 1895b			E
berkelyensis Bell, 1936			W
* *bulboides* N. & C., 1959	Dash 1970, Nurminen 1973a		E
* *bulbosa* (Rosa, 1887)	Bell 1942, 1962, Nurminen 1973a		M,E
californica Eisen, 1904			W
canadensis Dash, 1972			W
caprensis Bell, 1947 augm. N.&C. ,1959	Nurminen 1973a		E
douglasensis Welch, 1914a			E
firma Smith & Welch, 1913		Bell 1942	E
fuchsi Eisen, 1904			W
* *galba* (Hofm., 1845)	Nurminen 1973a		E
harrimani Eisen, 1904			W
johnsoni Eisen, 1904			W
kalffi Nurm., 1973a			E
longa Moore, 1895b			E
losangelensis Bell, 1936			W
* *macgregori* Eisen, 1904			W
nielseni Dash, 1972			W
oconeensis Welch, 1914a			E
* *paroniana* Issel, 1904	Nurminen 1973a		E
parva Moore, 1895b			E
popofiana Eisen, 1904			W
* *ratzeli* (Eisen), 1872	Nurminen 1973a		E
sacculata Bell, 1936			W
santaebarbarae Eisen, 1904		Altman 1936	W
santaerosae Eisen, 1904		Bell 1942	W
sima Welch, 1914a			E
sonorae Eisen, 1904			M
sylvestris (Leidy, 1882)			E
tenera Smith & Welch, 1913			E
whatcomae Altman, 1936			W
**?anglica* Friend, 1912a	Bell 1962		E
Grania Southern, 1913			
americana Kennedy, 1965			E

SPECIES * (species first discovered outside North America)	N. Am. records of species first discovered outside N. Am.	Additional N. Am. records of species first discovered in N. America	Area of N. Am. records
Hemigrania Lasserre 1971			
* *postclitellochaeta* (Knolln., 1935) This species was removed to *Hemigrania* from *Marionina* by Lasserre (1971).	Lasserre 1971		E
Henlea Michaelsen 1889			
californica Eisen, 1904			W
c. monticola Eisen, 1904			W
erhorni Eisen, 1904			W
eiseni Bell, 1942		Bell 1945	M,W
glabra Altman, 1936			W
* *heleotropha* Steph., 1922 augm. N. & C. 1959	Nurminen 1973b		A
helenae Cern., 1937 *(californica helenae)*			W
moderatoidea Altman, 1936			W
* *nasuta* Eisen, 1878	Bell 1962, Dash 1970, Welch 1919a		A
* *ochracea* (Eisen, 1878) *(arctica* Welch, 1919a) *(moderata* Welch, 1914a) *(tenella* Eisen, 1878) *(tubulifera* Welch, 1914b)	Bell 1962, Nurminen 1973b, Welch 1914a,b, 1919a		E,A
* *perpusilla* Friend, 1911; Cern., 1937	Dash 1970, Nurminen 1973b		A
scharffi Southern, 1910			E
udei (Eisen, 1904), Holmquist,1968		Bell 1962, Nielsen and Christensen 1963	A,W
urbanensis Welch, 1914a			E
* *ventriculosa* (Udekem, 1854)	Lasserre 1971, Nurminen 1973b		A
welchi Bell, 1942			E
**?parva* Friend, 1912b	Bell 1942		M,E
Lumbricillus Orsted, 1844			
* *arenarius* (Mich.) 1889,Knolln. 1935	Nurminen 1973b		A
annulatus Eisen, 1904			W
belli Tynen, 1969			W
charae (Tynen, 1970a)		Nurminen 1973b	A
codensis Lass., 1971			E
franciscanus Eisen, 1904			W
f. borealis Eisen, 1904			W
f. unalaskae Eisen, 1904			W
georgiensis Tynen, 1969			W
* *kalatdlitus* Nurm., 1970	Nurminen 1973b		A
* *lineatus* Mull, 1774 *(agilis* Moore, 1905)	Lasserre 1971, Moore 1905, Welch, 1919a		A,E
merriami Eisen, 1904			W
m. elongatus Eisen, 1904			W
mirabilis Tynen, 1969			W
qualicumensis Tynen, 1969			W
ritteri Eisen, 1904			W
rutilus Welch, 1914a			E
santaeclarae Eisen, 1904			W
vancouverensis Tynen, 1969			W
Marionina Michaelsen, 1889			
* *achaeta* Lass., 1964	Lasserre 1971		E

SPECIES * (species first discovered outside North America)	N. Am. records of species first discovered outside N. Am.	Additional N. Am. records of species first discovered in N. America	Area of N.Am. records
alaskae Eisen, 1904			W
americana Eisen, 1904			W
* *argentea* (Mich., 1889)	Dash 1970, Nurminen 1973a		E
canadensis Dash, 1970			E
citrina (Eisen, 1904)			W
craggi Dash, 1970			E
dirksi Bell, 1942			E
forbesae Smith & Welch, 1913			E
metlakatlensis (Eisen, 1904)			W
multiannulata (Altman, 1936)			W
multiannuloides (Altman, 1936)			W
modesta (Eisen, 1904)			W
paucispina (Eisen, 1904)			W
* *preclitellochaeta* N.& C., 1963	Lasserre 1971		E
pugetensis (Altman, 1931)			W
saxicola (Eisen, 1904)			W
* *southerni* (Cern., 1937)	Lasserre 1971		E
* *spicula* (Leuckart, 1847)	Lasserre 1971		E
* *subterranea* (Knolln., 1935)	Lasserre 1971		E
welchi Lass., 1971			E
Many species have been transferred to *Marionina* from the genus *Enchytraeus* (because they lacked peptonephridia); those from the invalidated genus *Michaelsena* are also placed here. *Marionina americana* is retained, though Nielsen and Christensen (1959) refer it to *Lumbricillus*.			
Mesenchytraeus Eisen, 1878			
altus Welch, 1917b			E
americanus Bell, 1942			E
arcticus Bell, 1942			W
argentatus Nurm., 1973b		Nurminen 1973a	A,E
armatus (Lev., 1884) *kananaskis* Dash, 1970			E
atriophorus Altman, 1936			W
beringensis Eisen, 1904			W
chromophorus Altman, 1936			W
diplobulbosus Bell, 1949			W
eastwoodi Eisen, 1904			W
fontinalis Eisen, 1904			W
franciscanus Eisen, 1904			W
fuscus Eisen, 1904			W
f. inermis Eisen, 1904			W
gelidus Welch, 1916			W
grandis Eisen, 1904			W
harrimani Eisen, 1904			W
hydrius Welch, 1919b			W
johanseni Welch, 1919a			A
kincaidi Eisen, 1904			W
macnabi Bell, 1942			W
maculatus Eisen, 1904		Altman 1936	W
magnus Altman, 1936			W
minimus Altman, 1936			W
monothecatus Bell, 1945			W
nanus Eisen, 1904			W
obscurus Eisen, 1904			W
orcae Eisen, 1904			W
pedatus Eisen, 1904			W
penicillus Eisen, 1904			W

SPECIES * (species first discovered outside North America)	N. Am. records of species first discovered outside N. Am.	Additional N. Am. records of species first discovered in N. America	Area of N. Am. records
setchelli Eisen, 1904			W
solifugus (Emery, 1898) (including *M.s. rainierensis* Welch, 1916)		Nature 1970, Eisen 1904, Goodman 1971, Gudger 1923, Moore 1899, Odell 1949, Russel 1892, Tynen 1970b, 1972, Welch 1916, 1917c, Wright 1887	
unalaskae Eisen, 1904			W
Stephensoniella Cernosvitov 1934			
marina (Moore, 1902)			E

Discussion

One hundred and forty-three North American species are listed. Of these, 74 species occur east of the Rockies, above and below the Arctic Circle. Of these 74 eastern species, 36 are known from Europe, Iceland, or Greenland and nearly all these 36 species were discovered in recent studies (Dash 1970, Lasserre 1971, Nurminen 1973a,b), but these studies revealed none of the species described in older North American work. As pointed out by Nurminen (1973c), these facts lead one to suspect that many of the formerly described North American species are, in fact, European species under different names.

The enchytraeid fauna west of the Rockies is seemingly quite distinct from that of the eastern Nearctic and may, at least where littoral forms are concerned (Tynen 1969), have affinities with that of Siberia.

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